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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/699,228	10/30/2003	Richard L. Sandstrom	2002-0048-02	3385
21773	7590	02/17/2006	EXAMINER DETSCHER, MARISSA	
CYMER INC LEGAL DEPARTMENT 17075 Thornmint Court SAN DIEGO, CA 92127-2413			ART UNIT 2877	PAPER NUMBER

DATE MAILED: 02/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No.		Applicant(s)	
	10/699,228		SANDSTROM, RICHARD L.	
	Examiner		Art Unit	
	Marissa J. Detschel		2877	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 January 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-9 is/are allowed.
- 6) ☒ Claim(s) 10 and 11 is/are rejected.
- 7) ☒ Claim(s) 12 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 January 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

Applicant's arguments filed January 23, 2006 have been fully considered but they are not persuasive.

Applicant respectfully asserted that Ordell was not anticipatory to either claim 10 or claim 11, due to the fact that Ordell discloses an optical angle-measuring device, and not a "system for testing etalons" as set forth in claim 10. However, the Examiner disagrees. The optical angle-measuring device of Ordell uses an etalon mounted to a rotational stage as an angle detector. The fringes formed during the rotation of the etalon represent natural "scale lines" moving past a detector, and these "scale lines" define a scale for defining the rotation of the etalon in relation to a light emitted on the etalon (column 1, line 65 to column 2, line 4). This is an example of a system for testing etalons. The testing of the etalon comes in the creation of the scale of fringes as the etalon is rotated. Any discretion in this scale would represent an error in the rotation of the etalon, and, therefore, represent an error in a testing of the etalon.

Concerning Applicant's assertions that Ordell does not disclose "collimating optics for collimating said laser light source to produce a collimated beam...", Examiner disagrees. The combination of the lens and the aperture of Ordell represents collimating optics in that the setup gathers (collimates) the light projected by the laser before sending the laser beam to the etalon to be tested.

Response to Amendment

The amendment filed on January 23, 2006 has been fully considered by the Examiner. The drawings filed on January 23, 2006 have been accepted by the Examiner as well. All objections to the claims, specification, and drawings set forth have been withdrawn.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 10 and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Ordell (USPN 4,969,744).

In regards to claim 10, Ordell discloses a system for testing etalons comprising:

a rotational stage (table that rotates (50)),

a mounting means for mounting a test etalon (E) on said rotational stage (column 5, lines 18-19),

a laser light source (L) for producing a coherent light source (column 5, lines 16-17),

collimating optics (2 and 3) for collimating said light source to produce a collimated beam for illuminating said test etalon (column 5, lines 16-19),

a detector for detecting interference patterns in light reflected from said test etalon (column 5, lines 21-31).

Regarding claim 11, Ordell discloses a system that comprises a control means to provide precision rotation of said test etalon on said rotation stage and for recording said interference patterns at each of a plurality of rotation positions. The system rotates the etalon through small angles of known values in conjunction with a series of synchronous clock pulses. These pulses are utilized for the purpose of interpolation between fringes (interference patterns). (column 4, lines 29-35) The graph shown in figure 2 for the readout of detector D shows properties of interference fringes for set angles (axis labeled X) by providing readout of the intensities (axis labeled I) for each angle.

Allowable Subject Matter

Claims 1-9 are allowed.

Claim 12 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement for reasons for the indication of allowable subject matter:

As to claims 1 and 12, the prior art of record, taken alone or in combination, fails to disclose or render obvious a method for testing etalons by analyzing interference patterns (fringes) **to estimate the uniformity of etalon spacing**, in combination with the rest of the limitations of claims 1 and 12.

Claims 2-9 are allowable as being dependent upon the allowable subject matter in claim 1.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

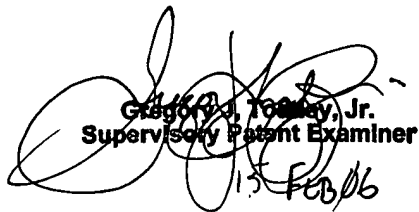
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marissa J. Detschel whose telephone number is 571-272-2716. The examiner can normally be reached on M-F 8:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory J. Toatley, Jr. can be reached on 571-272-2059. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2877

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Marissa J Detschel
February 10, 2006
MJD


Gregory J. Tooley, Jr.
Supervisory Patent Examiner
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